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TITLE: Structured image (SI) format for describing complex color raster images

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An SI object acts as a reference to a data file, or representation, that can be rendered into a raster image. The representation may be one of several types, such as, raster, text and/or vector graphics. Also one object may reference several representations, each of which represents the same image but may differ in the storage format, size and/or resolution. When ReadObject() is invoked, it must determine which representation is the "best" representation to render by invoking the Finder() procedure. Finder() will locate all representations referenced by the object and will choose which representation is most appropriate for rendering.

2) Using current reference binding mechanism. The SID file can include undefined references and binding information as described in another file as "tag" definitions corresponding to undefined references in SIDL. Binding is realized, for example, by concatenating the SID file and the bind information to create a complete SID;

The SID file associated with the top level SI is depicted in FIGS. 19a-c. SIs are described (again, the following source code is subject to copyright protection and can be executed on the hardware system previously described) as a set of "tags" in SIDL, which are specified by the name of tag type and tag

body enclosed by "[" and "]". Tags may be named using the ":name" syntax. The tag name can be used as reference to other tags by prefixing "\$". The Object tag is the top level tag of the SI. In this example, the Object tag represents an IPD object and its description is in the referenced tag "ipd1". The IPD tag "ipd1" defines the AspectRatio and DefaultWidth tags, the pasteboard attributes FitMode, Justification and Angle, and four Merge tags whose sequence specifies the merging order of "merge 1" through "merge4". Each Merge tag specifies a merging point relative to the pasteboard with the MergePoint tag, and an image processing sequence with a Path tag. The Path tag denotes the child object with another Object tag, the relative size with a Size tag, the position of the ControlPoint (relative to the child) with the ControlPoint tag, and the image processing operations with a list of IPO tags. Notice that path1, path2 and path4 all refer to raster, text or graphic files. Path3 refers to another SID file that creates a raster image from combining a graphical tree with a raster image of a house.